

Claims:

- 1-5. (Canceled)
6. (Currently Amended) A method of preparing a stable, metal oxide dispersion comprising the steps of:
- providing a slurry comprising from about 0.1-50% by weight of metal oxide particles and a quantity of a carrier, said carrier comprising a member [[being]] selected from the group consisting of aliphatic and aromatic C4-C20 hydrocarbon compounds, fuel additives and glycol ethers, ~~esters, gasoline, diesel, and kerosene~~;
- pulverizing said metal oxide particles dispersed in said slurry; and
- mixing said slurry with a quantity of surfactant thereby forming said dispersion, said mixing step being for a sufficient time to contact said metal oxide particles with said surfactant and to suspend said metal oxide particles in said dispersion.
7. (Original) The method of claim 6, said process further comprising the step of adding an additional quantity of said carrier to said slurry prior to said surfactant addition step.
8. (Original) The method of claim 6, said metal oxide particles being selected from the group consisting of particles of MgO, CaO, TiO₂, Fe₂O₃, SrO, BaO, and combinations thereof.
9. (Original) The method of claim 8, said metal oxide particles being MgO particles.

10. (Original) The method of claim 6, said surfactant being selected from the group consisting of saturated and unsaturated fatty acids, aliphatic and aromatic sulfonic acids, and combinations thereof.

11. (Original) The method of claim 10, said surfactant being selected from the group consisting of oleic acid, dodecylbenzene sulfonic acid, and combinations thereof.

12. (Original) The method of claim 6, said pulverizing step comprising passing said slurry through a mill.

13. (Original) The method of claim 6, said dispersion comprising from about 50-90% by weight of said carrier, from about 5-35% by weight of said metal oxide, and from about 10-50% by weight of said surfactant.

14. (Original) The method of claim 6, said metal oxide particles remaining suspended in said dispersion for at least about one month.

15-25. (Canceled)

26. (New) A method of preparing a stable, metal oxide dispersion comprising the steps of:

providing a slurry comprising from about 0.1-50% by weight of metal oxide particles and a quantity of a carrier, said carrier comprising a member selected from the group consisting of aliphatic and aromatic C4-C20 hydrocarbon compounds, fuel additives, glycol ethers, and esters;

pulverizing said metal oxide particles dispersed in said slurry; and

mixing said slurry with a quantity of surfactant selected from the group consisting of saturated and unsaturated fatty acids, aliphatic and aromatic sulfonic acids, and combinations thereof, thereby forming said dispersion,

said mixing step being for a sufficient time to contact said metal oxide particles with said surfactant and to suspend said metal oxide particles in said dispersion.

27. (New) The method of claim 26, said surfactant being selected from the group consisting of oleic acid, dodecylbenzene sulfonic acid, and combinations thereof.

28. (New) A method of preparing a stable, metal oxide dispersion comprising the steps of:

providing a slurry comprising from about 0.1-50% by weight of metal oxide particles and a quantity of a carrier, said carrier comprising a member selected from the group consisting of aliphatic and aromatic C4-C20 hydrocarbon compounds, fuel additives, glycol ethers and esters;

pulverizing said metal oxide particles dispersed in said slurry; and

mixing said slurry with a quantity of surfactant thereby forming said dispersion,
said mixing step being for a sufficient time to contact said metal oxide particles with said
surfactant and to suspend said metal oxide particles in said dispersion,
said metal oxide particles comprising a member selected from the group consisting of MgO,
CaO, TiO₂, Fe₂O₃, SrO, BaO, and combinations thereof.